

RESPONSE UNDER 37 C.F.R. 1.116 EXPEDITED PROCEDURE EXAMINING GROUP 2181

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Padawer et al.

Examiner:

Xuong My Chung Trans

Application No.:

09/862,387

Group Art Unit:

2181

Filed:

May 21, 2001

Docket No.:

50037.19US01

Title:

SYSTEM AND METHOD FOR POWERING DOWN A MOBILE DEVICE

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: BOX AF, Commissioner for Patents, Washington, D.C. 20231 on December 31, 2002.

Name: Mark R. Hennings

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AMENDMENT

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BOX AF Commissioner for Patents Washington, D.C. 20231

Technology Center 2100

Dear Sir:

In response to the Final Office Action of October 31, 2002, please amend the aboveidentified application as follows.

In the claims:

Please amend claims 1, 2, 4, and 5 as follows:

- 1. (Twice Amended) A system for managing power consumption on a mobile device having an operating system, a user interface, and a user-actuated hard switch, the system comprising:
 - a timer configured to generate a wake event upon the expiration of a countdown time;
 - a first set of data including a sleep time and a wake time;
 - a second set of data including future appointment times;

an appointment register configured to store and retrieve time data including the second set of data; and,

an application configured to put the mobile device in a low power consumption state substantially near the sleep time, and to bring the mobile device out of the low power consumption state at substantially the earlier of the wake time or one of the future appointment times.

- 2. (Amended) The system of claim 1, wherein the application is further configured to not bring the mobile device out of the low power consumption state if the mobile device has been shut off by the user-actuated hard switch.
- 4. (Amended) The system of claim 3, wherein the user interface provides a countdown mechanism to allow a user prompt and response to cause_an abort signal to be sent to the application prior to putting the mobile device into the low power consumption state.
- 5. (Amended) The system of claim 3, wherein the user interface provides a countdown mechanism to allow a user prompt and response to cause an abort signal to be sent to the application prior to bringing the mobile device out of the low power consumption state.

REMARKS

Claims 1-22 are pending. Claims 1-6, and 10-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikinis, et al. (5,542,035) (hereinafter "Kikinis"). Claims 7-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikinis in view of Vossler (6,317,593) (hereinafter "Vossler") and/or Vong, et al. (6209011) (hereinafter "Vong"). Claims 1, 2, 4, and 5 have been amended. Applicants respectfully submit that no new matter has been added. Applicants respectfully submit that the claims are patentable over the art of record for the reasons articulated below.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1-6, and 10-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikinis. Applicants respectfully traverse the rejection under 35 U.S.C. § 103.

To establish a prima facie case of obviousness under 35 U.S.C. § 103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). When the examiner or the Board rely on what they assert to be general knowledge to negate patentability, that knowledge must be articulated and placed on the record. *In re Lee*, 61 USPQ2d 1430 (CA FC 2002).

Regarding claims 1 and 6, Kikinis (as cited by the Office Action) fails to teach or suggest an appointment register configured to store and retrieve time data including the second set of data, and wherein the second set of data includes future appointment times. Rather, Kikinis discloses TCPM routines in the BIOS that are configured to adjust startup times according to specific events. Kikinis provides two examples of such specific events (col. 3, lines 51-64 and col. 4, lines 3-10). The specific events provided in both examples are incidental user activity, which is monitored by the routine. In the first example, the user activity (or, rather, the lack thereof) is used to adjust the shutdown time. In the second example, the user activity is used to (without human intervention) adjust the startup time by creating a record of past user activity (i.e., logging the time at which a user starts to use a computer). This teaches away from the limitation of an appointment register, in which a user personally enters time data regarding future appointments for storage in the appointment register. This distinction is significant from the asserted prior art because future start times of claim 1 can be adjusted based upon appointments that are scheduled for the future. The office action has not articulated any motivated combination of general knowledge and Kikinis to supply the limitation of the appointment register. Furthermore, no reasonable expectation of success has been made of record for using an appointment register for storing and retrieving time data including the second set of data.

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For at least the reasons stated above, Applicants respectfully submit that the rejection of independent claim 1 (and dependent claim 6) is improper and that independent claim 1 and dependent claim 6 are allowable.

Regarding claim 2, Kikinis (as cited by the Office Action) fails to teach or suggest an application that is configured to not bring the mobile device out of the low power consumption

state if the mobile device has been shut off by the user-actuated hard switch. Rather, Kikinis teaches the use of simple automatic timer switches in an inflexible power conservation system (col. 1, lines 35-46). The timer switches of Kikinis cut power to the system without human intervention. This is distinguished from claim 2, which recites a "user-actuated hard switch." The timer switches of Kikinis do not cause the application to operate in response to the switch to "not bring the mobile device out of the low power consumption state if the mobile device has been shut off by the user-actuated hard switch." Kikinis does not teach or suggest using the timer switches to place a device (much less a mobile device) in a low power state; rather Kikinis discloses that the timer switches inflexibly operate to cut power to the system to the immediate detriment of the user. Furthermore, Kininis does not teach or suggest using an application to determine whether the mobile device has been shut off by the hard switch, as recited by claim 2. The timer switch of Kikinis solely determines when the system is to be powered up. This teaches away from an application that is configured to not bring the mobile device out of the low power consumption state if the mobile device has been shut off by the user-actuated hard switch. Thus, the rejection of dependent claim 2 is improper and dependent claim 2 is allowable. Dependent claim 2 is also allowable at least for the reasons given for the claim from which it depends.

Regarding claim 3, Kikinis (as cited by the Office Action) fails to teach or suggest a user interface configured to receive the second set of data, wherein the second set of data includes future appointment times. Rather, Kikinis teaches the use of a user interface to allow a user to modify the parameters of Figures 2 and 3 of Kikinis, which only address the first set of data. Kikinis does not teach or suggest that the UI could provide the other times in the second set of data including future appointment times as required by claim 3. Kikinis instead teaches away

from manual entry of the other times in the second set of data by providing routines that automatically record user history to modify a wake time. Thus, the rejection of dependent claim 3 is improper and dependent claim 3 is allowable. Dependent claim 3 is also allowable at least for the reasons given for the claim from which it depends.

Regarding claims 4-5, Kikinis (as cited by the Office Action) fails to teach or suggest a user interface configured to provide a countdown mechanism to allow a user prompt and response to cause an abort signal to be sent to the application prior to putting the mobile device into (or out of) the low power consumption state. Rather, Kikinis teaches using TCPM routines to automatically update the earlier or later shutdowns. In fact, Kikinis does not teach prompting the user to determine whether to abort the shutdown or wake up. Col. 3, lines 62-64. This teaches away from providing a user interface configured to provide a countdown mechanism to allow a user prompt and response to cause an abort signal to be sent to the application prior to putting the mobile device into the low power consumption state. Thus, the rejection of dependent claims 4-5 is improper and dependent claims 4-5 are allowable. Dependent claims 4-5 are also allowable at least for the reasons given for the claims from which they depend.

Claims 10-22 recite method steps substantially corresponding to the system claims 1-6, although claims 10-22 are substantially different in other ways. Thus, the rejection of claims 10-22 is improper and claims 10-22 are submitted to be allowable for at least the reasons given above for system claims 1-6.

Claims 7-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikinis in view of Vossler and/or Vong. The rejection of claims 7-9 is improper because claims 7-9 are at least allowable for the reasons given above for the claim 6.

CONCLUSION

Applicants respectfully request favorable consideration for the allowance of claims 1-22. It is respectfully submitted that all claims in this case are patentable and that the application is in condition for allowance. Should any further aspects of the application remain unresolved, the Examiner is invited to telephone Applicants' attorney at the number listed below. Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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PATENT TRADEMARK OFFICE

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims 1, 2, 4, and 5 have been amended as follows:

- 1. (Twice Amended) A system for managing power consumption on a mobile device having an operating system, a user interface, and a <u>user-actuated hard</u> switch, the system comprising:
 - a timer configured to generate a wake event upon the expiration of a countdown time;
 - a first set of data including a sleep time and a wake time;
 - a second set of data including future appointment[other] times;

an appointment register configured to store and retrieve time data including the second set of data; and,

an application configured to put the mobile device in a low power consumption state substantially near the sleep time, and to bring the mobile device out of the low power consumption state at substantially the earlier of the wake time or one of the future appointment[other] times.

- 2. (Amended) The system of claim 1, wherein the application is further configured to not bring the mobile device out of the low power consumption state if the mobile device has been shut off by the <u>user-actuated hard</u> switch.
- 4. (Amended) The system of claim 3, wherein the user interface provides a countdown mechanism to allow a user prompt and response to cause an abort signal to be sent to the application prior to putting the mobile device into the low power consumption state.

5. (Amended) The system of claim 3, wherein the user interface provides a countdown mechanism to allow a user prompt and response to cause an abort signal to be sent to the application prior to bringing the mobile device out of the low power consumption state.